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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/734,628

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Taisuke Hosokawa

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EXAMINER

PHU, SANH D

ART UNIT

PAPER NUMBER

2618

DATE MAILED: 07/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/734,628	HOSOKAWA, TAISUKE	
	Examiner	Art Unit	
	Sanh D. Phu	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/15/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The IDS filed 12/15/2003 has been considered and recorded in the file.

Drawings

2. Figures 5 and 6 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claims 1-20 are objected to because of the following informalities:

Claim 1 recites the limitation "the received SIR". This limitation is lack of antecedent basis.

Claim 2 recites the limitations “the transmission power control system”, “the present invention”, “the degree”, “the desired SIR” and “the received SIR”.

These limitations are lack of antecedent basis. It appears that the phrase “The transmission power control system according to the present invention” should be --The transmission power control system according to claim 1--.

Claim 3 recites the limitations “the time integral” and “the measured value”. These limitations are lack of antecedent basis.

Claims 5, 9, 10 and 11 recite the limitation “the memory”. This limitation is lack of antecedent basis.

Claim 6 recites the limitations “the desired SIR controller”, “the desired communication quality value” of the phrase “the desired communication quality value from a demodulator”, “the desired communication quality value” of the phrase “the desired communication quality value from a communication quality measuring part”, “the measured SIR value” of the phrase “the measured SIR value from an SIR measuring unit from a memory” and “the measured SIR” and “the SIR measuring part” of the phrase “the measured SIR value from the SIR measuring part”. These limitations are lack of antecedent basis.

Claim 8 recites the limitations “the communication quality”, “the SIR” of the phrase “the SIR of a received signal”, “the desired value and measured value” of the phrase “the desired value and measured value of the communication quality” and “the desired value and measured value” of the phrase “the desired value and measured value of SIR”. These limitations are lack of antecedent basis.

Appropriate correction is required.

Claims, (if any) dependent on the above claims, are therefore also objected.

4. Since the claims are replete with a plurality of lacks of antecedent basis, and therefore are too burdensome for the examiner to specifically point out, the applicant is hereby requested to correct them, as being stated above, and others which exist in the claims.

Claim Rejections – 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-7 and 9-20 are rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

The claim(s) are narrative in form and replete with indefinite and functional or operational language. The structure which goes to make up the device must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device. Note the format of the claims in the patent(s) cited (see M.P.E.P. 706.03(d) [R3]).

Claim Rejections – 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

8. Claims 1 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Engstrom et al (6,639,934).

–Regarding to claim 1, see figure 5A, and col. 4, line 59 to col. 5, line 42, Engstrom et al discloses a transmission power control system (see figure 5A) for controlling, at a time of wireless communication between a base station and a mobile station the transmission power from the base station to the mobile station to an optimum value, (see col. 4, lines 35, 36, 59–64), by using a SIR target, (the SIR target considered here equivalent with the limitation “a desired SIR (desired signal power versus noise power ratio)”), (see col. 1, lines 30–35, col. 5, lines 34–42), wherein: the desired SIR is preset (by device (108, 114) (see

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figure 5A)) on the basis of a communication quality (FER) of the communication (see figure 6A, col. 6, lines 5-37) and the SIR error between an a received SIR and the SIR target (see figure 5A, col. 5, lines 9-33), (the SIR error considered here equivalent with the limitation "the degree of follow-up of the received SIR from the desired SIR").

-Regarding to claim 7, Engstrom et al discloses that the wireless communication between the base station and the mobile station is a wireless communication system such as W-CDMA system using outer loop transmission power control (see (102) of figure 5A, and col. 1, lines 14-35).

Claim Rejections – 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 5 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Engstrom et al in view of Sollenberger (4,695,969).

-Regarding to claim 5, Engstrom et al does not teach the desired SIR value is stored, and the newly preset desired SIR value is also stored in the memory, as claimed.

However, Engstrom et al discloses that the SIR target (considered here equivalent with the limitation "desired SIR value") is delayed by delay (116) for a process (114) to generate an updated SIR target (considered here equivalent with the limitation "newly preset desired SIR value"), and subsequently the updated SIR target is delayed by the delay (116) for the process (114) to generate a subsequently updated SIR target in an adaptive manner (see figure 5A).

Using a memory for storing a value to delay/retrieve later the value at a desired time is well-known in the art. For instance, Sollenberger teaches using a memory (RAM (103)) for storing a value to delay or retrieve later the value at a desired time provided by clock (CLK) (see figure 1, col. 3, lines 45–52).

Since Engstrom et al does not teach in detail how the delay (116) is implemented, it would have been obvious for a person skilled in the art to

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implement the delay (116) with a memory, as taught by Sollenberger, in such a way that the memory would be used for storing the SIR target to delay the SIR target for the process (114) to generate an updated SIR target and for storing the updated SIR target for the process (114) to generate a subsequently updated SIR target so that the SIR target would be adaptively updated as required.

With such the implementation, Engstrom et al in view of Sollenberger teaches the desired SIR value "SIR target" is stored, and the newly preset desired SIR value (updated "SIR target") is also stored in the memory, as claimed.

-Regarding to claim 19, Engstrom et al discloses that the wireless communication between the base station and the mobile station is a wireless communication system including a W-CDMA system using outer loop transmission power control (see (102) of figure 5A, and col. 1, lines 14-35).

11. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Engstrom et al in view of Dohi et al (6,341,224).

-Regarding to claim 8, Engstrom et al discloses a transmission power controlling system comprising:

a communication quality measuring part ((104) or (204)) for measures parameters representing the communication quality including BER and FER, (the FER considered here equivalent with the limitation "BLER"), (see figures 5A, 6A, col. 6, lines 5–38);

an SIR measuring part (inherently included) for measuring and providing a SIR (see figure 5A, col. 5, lines 9–10);

a desired SIR control part (108, 114) (see figure 5A) for determining a desired SIR value "SIR target" based on the "Proposed SIR target adjustment", which is obtained by being based on a desired value "FER target" (see figure 6A) of communication quality and measured value "FER" (outputted from device (208) (see figure 6A)) of the communication quality, and the "SIR error", which is obtained by being based on the desired value SIR "SIR target" and the measured value of SIR (see col. 5, lines 8–33, col. 6, lines 5–38).

Engstrom et al does not disclose that whether the measured SIR is a SIR of a received signal and Engstrom et al does not disclose a demodulating part for demodulating various data from their received signals, as claimed.

Dohi et al a process for measuring a SIR wherein the process comprises a demodulator (31) for demodulating various data from received signals (DIGITAL SIGNAL) and a SIR measuring unit (6) for measuring the SIR of the received signals (DIGITAL SIGNAL) by using the output of the demodulator (see figure 2, and col. 4, lines 20–26).

Since Engstrom et al does not teach in detail how the SIR is measured and obtained, it would have been obvious for a person skilled in the art to implement Engstrom et al with a demodulator and a SIR measuring unit, as taught by Dohi et al, in such a way that the demodulator would demodulating various data from received signals of Engstrom et al system, and Engstrom et al SIR measuring part would be implemented with a SIR measuring unit for measuring the SIR of the received signals by using the output of the demodulator, so that with such the implementation, the measured SIR would be obtained as required.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanh D. Phu whose telephone number

is (571)272-7857. The examiner can normally be reached on M-Th from 7:00-17:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on (571) 272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sanh D. Phu
Examiner
Division 2618

5/24/06

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PATENT EXAMINER

